North America's Leader in Hazardous Material Information Management

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MSDS PRODUCT INFORMATION

Date: 10/07/2005

To: MSDS Requester

From: 3E Company

Subject: The MSDS you have requested

[] MSDS NOT REQUIRED

In response to your request for a Material Safety Data Sheet, according to the OSHA Hazard Communicatin Standard (Right-to-Know), the following item is an article. Articles are defined in 29 CFR 1910.1200(c). Products such as Drugs, cosmetics, food, or alcoholic beverages, wood or wood products, and tobacco or tobacco products, as defined in 29 CFR1910.1200(b)(6), are exempt from the Hazard Communication Standard. Items that are considered articles, as defined in 29 CFR 1910.1200(c), are also exempt from this Standard. Therefore, the manufacturer is not required to provide an MSDS for this product.

[X] MSDS DISCONTINUED PRODUCT

In response to your request for a Material Safety Data Sheet, the manufacturer has discontinued the product listed below. The MSDS Attached is the most current version, or an MSDS is no longer available.

[] MSDS BEST COPY AVAILABLE

The MSDS attached is the best copy available from the manufacturer.

[] MANUFACTURER NO LONGER IN BUSINESS

In response to your request for a Material Safety Data Sheet, a current MSDS could not be obtained for this product. It has been determined that the manufacturer listed below is no longer in business. A current address and phone number could not be located.

Manufacturer: Essroc Cement

Product Name: Portland Cement (DISCONTINUED)



Date: February 24, 1994

Material Safety Data Sheet for Portland Cement



Section I—Identity

Manufacturer's name and address: Copiay Cement Company-ESSROC Materials, Inc.

P.O. Box 32, Route 248 Nazareth, PA 18064

Emergency Telephone Number: (215) 837-6725 Corporate Headquarters

(219) 753-5121 Logansport, IN Plant

Chemical Name and Synonyms: Portland Cement (CAS #65997-15-1)

Trade name and synonyms: Type i, iA, iii and Block

Section II-Chemical Data

Chemical family: Calcium Salts

Formula: Portland cement consists of finely ground portland cement clinker mixed with a small amount of calcium sulfate to control set. Portland cement clinker is a sintered material produced by heating to high temperatures (greater than 1200 degrees celsius) a mixture of substances such as limestone and shale from the earth's crust. The substances manufactured are essentially hydraulic calcium silicates contained in a crystalline mass, not separable into the individual components.

Substances similar to the following are known to be present in portland cement

3CaO SiO₂ (CAS # 12168-85-3) 2CaO.SiO₂ (CAS # 10034-77-2) 3CaO.Al₂O₃ (CAS # 12042-78-3) 4CaO Al₂O₃.Fe₂O₃ (CAS # 12068-35-8) CaSO₄.XH₂O (CAS # 13397-24-5)

Small amounts of CaO, MgO, K₂SO₄, Na₂SO₄ may also be present.

Section III-Hazardous Ingredients

Ingredients; Portland cements are listed by OSHA in 29 CFR1910.1000, Table Z-1-A, and require material safety data sheets (*FR*, January 19, 1989). MSHA (30 CFR 55 5.-1, Ref. 2, ACGIH TLV's for 1973, Appendix E) and ACGIH (TLV's for 1984-5, Appendix D) list portland cements as nuisance dusts. Portland cements are NOT listed by NTP, IARC, OR OSHA as carcinogens However, since portland cement is manufactured from raw materials mined from the earth (limestone, marl, sand, shale, clay, etc.) and process heat is provided by burning fossil fuels, trace, but detectable, amounts of naturally occurring, and possibly harmful elements may be found during chemical analysis. Under ASTM standards, portland cement may contain .75 percent insoluble residue. A fraction of these residues may be free crystalline silica.

Section IV-Physical Data

Boiling Point: Not applicable, portland cement is a powdered solid.

Vapor Pressure: Not applicable, portland cement is a powdered solid.

Vapor Density: Not applicable, portland cement is a powdered solid

Solubility in Water: Slight (0.1-1.0%)

Specific Gravity: (H₂O=1) 3 15

Evaporation Rate: Not applicable, portland cement is a powdered solid

Appearance and Odor: Gray or white powder, no odor

Melting Point: Not applicable

Section V-Fire and Explosion Hazard Data

Flash Point: Portland cements are noncombustible and not explosive.

Flammable or Explosive Limits: Not applicable.

Extinguishing Media: Not applicable.

Special Firefighting Procedures: Not applicable

Unusual Fire and Explosion Hazards: None

Lower Explosive Limit: Not applicable.

Upper Explosive Limit: Not applicable

Section VI-Health Hazard Data

ACGIH Threshold Limit Value (1988-89): Total dust containing no asbestos and less than 1%

silica-10 mg/m3

OSHA PEL (Transitional): Total dust-50 million particles/ft³

OSHA PEL (Final): Total dust--10 mg/m³
Respirable Dust--5 mg/m³

Effects of Overexposure:

Acute: Wet cement, especially as an ingredient in plastic (unhardened) concrete, mortar or slurries, can dry the skin and cause caustic burns. Direct contact with the eyes can cause irritation. Inhalation can irritate the upper respiratory system.

Chronic: Cement dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. [Cement may contain trace (less than 0.05%) amounts of chromium salts or compounds including hexavalent chromium, or other metals found to be hazardous or toxic in some chemical forms. These metals are mostly present as trace substitutions within the principal minerals.]

Emergency and First Aid Procedures: Irrigate eyes immediately and repeatedly with water and get prompt medical attention. Wash exposed skin areas with soap and water. Apply sterile dressings if ingested, consult a physician immediately. Drink water.

Section VII-Reactivity Data

Stability: Product is stable. Keep dry until used

Incompatibility: Aluminum powder and other alkali and alkaline earth elements will react in wet

mortar or concrete, liberating hydrogen gas.

Hazardous Decomposition Products: None

Hazardous Polymerization: Will not occur

Section VIII-Spill Procedures

Steps to be taken in case material is spilled: Use dry cleanup methods that do not disperse the dust into the air. Avoid breathing the dust. Emergency procedures are not required

Disposal Method: Small amounts of material can be disposed of as common waste or returned to the container for later use if it is not contaminated. Large volumes may require special handling

Section IX-Special Protection Information

Respiratory Protection: In dusty environments, the use of a MSHA/NIOSH-approved respirator is recommended.

Ventilation: Local exhaust can be used to control airborne dust levels.

Eye Protection: Use tight fitting goggles in dusty environments

Skin Protection: Use barrier creams, impervious, abrasion- and alkali-resistant gloves, boots and protective clothing to protect the skin from prolonged contact with wet cement in plastic concrete, mortar or slurries. Immediately after working with cement or cement-containing materials, workers should shower with sortp and water. Precautions must be taken. Cement burns with little warning—little heat is sensed.

Section X-Abbreviations

ACGIH	American	Conference o	if Governmental	Industrial Hygienists

ASTM American Society for Testing and Materials

CAS Chemical Abstract Service

CFR Code of Federal Regulations

ft3 Cubic foot

IARC International Agency for Research on Cancer

m³ Cubic Meter ma Milliarem

MSHA Mine Safety and Health Administration

NIOSH National Institute for Occupational Safety and Health

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit TLV's Threshold Limit Values

Note: This material safety data sheet attempts to describe as accurately as possible the potential exposures associated with normal cement use. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. Users have the responsibility to evaluate and use this product safety and to comply with all applicable laws and regulations.